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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,797	12/11/2003	Thomas Johnson	52791-702USPT	8190
24238	7590	08/10/2005	EXAMINER	
JENKENS & GILCHRIST 1401 MCKINNEY SUITE 2600 HOUSTON, TX 77010			CAMPBELL, THOR S	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/733,797

Applicant(s)

JOHNSON ET AL.

Examiner

Thor S. Campbell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batchelder (US 5054107) in view of Vischer et al. (US 4032748).

Batchelder discloses the claimed invention including *inter alia*, a heater for heating fluid comprising: at least one radiant energy source; a vessel 12 for carrying a fluid to be heated wherein said vessel is coiled around said radiant energy source 10; a reflecting chamber surrounding said vessel and said radiant energy source; at least one device for monitoring the temperature of said fluid at the outlet end of said vessel; and at least one control device for adjusting the radiation emitted from said radiant energy source in response to changes in the temperature recorded by said device for monitoring the temperature of said fluid, thermocouple 164 is encased in an inert casing and immersed in the process fluid at the outlet end of the quartz coil for controlling the flow and or heating of the radiant heat source. Batchelder fails to anticipate the claimed invention only in that the coiled tube 12 is disclosed as being quartz tubing rather than the claimed PTFE tubing. It is noted that Batchelder discloses the quartz tubing being connected to TEFLON tubing at the inlet and outlet.

Vischer discloses using a coiled PTFE tube in a fluid heating device comprising an electric heating element used to heat fluid within the tube so as to allow for expansion and

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contraction of the coiled tubing. It would have been obvious to one of ordinary skill in the art at the time the invention was made, in view of Vischer, to modify the device of Batchelder to use a PTFE coiled tube in place of the rigid quartz tube to allow for expansion and contraction without the need for the cushioning required with the quartz tube.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Response to Arguments

Applicant's arguments filed 05/09/05 have been fully considered but they are not persuasive. Applicant argues that the combination of the prior art is improper because there is no teaching in the art to combine nor is there any motivation in the art to combine. The examiner disagrees. It should be noted that the combination of elements found in the prior art needn't be for the same purpose that applicant has made the combination. Although applicant has combined the elements of a coiled PTFE tube with the radiant heater structure of Batchelder, in order that the device could be used to heat HF without the undesired etching of the quartz tubing, the use of a

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PTFE tube in place of the quartz tube in order to provide the benefits of scale reduction and removal as taught by Vischer is no less a valid reason to combine the claimed limitations thereby arriving at applicant's invention:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thor S. Campbell whose telephone number is 571-272-4776. The examiner can normally be reached on Mon-Fri 5:30AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TSC

THOR S. CAMPBELL
PRIMARY EXAMINER